

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously presented) A foam comprising a liquid phase and a gas phase wherein

the liquid phase comprises at least one sclerosing agent and is at least 20% vol/vol of at least one viscosity enhancing agent; and

the gas phase comprises at least 50% CO₂;
and wherein the foam has a density less than 0.25 g/ml and half life of greater than 100 secs.

2-3. (Canceled)

4. (Previously presented) A foam of claim 1, wherein the gas phase comprises at least 99% CO₂.

5. (Previously presented) A foam of claim 1, wherein the gas phase consists essentially of CO₂.

6-7. (Canceled)

8. (Previously presented) A foam of claim 1, wherein the half life is at least 180 seconds.

9. (Previously presented) A foam of claim 1, wherein the density ranges from 0.07 to 0.22 g/ml.

10-11. (Canceled)

12. (Previously presented) A foam of claim 1, wherein the density ranges from 0.08 to 0.14 g/ml.

13. (Previously presented) A foam of claim 1, wherein the gas phase further comprises another physiologically acceptable gas that is dispersible in blood.

14. (Previously presented) A foam of claim 1, wherein the gas phase further comprises O₂.

15. (Previously presented) A foam of claim 1, wherein the gas phase consists essentially of CO₂ and O₂.

16. (Previously presented) A foam of claim 1, wherein the at least one viscosity enhancing agent is chosen from glycerol and PVP.

17. (Canceled)
18. (Previously presented) A foam of claim 1, wherein the at least one sclerosing agent is chosen from polidocanol, glycerol and sodium tetradecyl sulphate.
19. (Previously presented) A foam of claim 1, wherein the at least one sclerosing agent is polidocanol.
20. (Previously presented) A foam of claim 1, wherein the polidocanol is present in a concentration ranging from 0.5 to 4% vol/vol in the liquid phase.
21. (Previously presented) A foam of claim 1, wherein the liquid phase further comprises water and/or saline solution.
22. (Previously presented) A foam of claim 1, wherein the liquid phase further comprises alcohol.
23. (Previously presented) A foam of claim 1, wherein the saline solution is phosphate buffered saline with a pH ranging from 6.0 to 8.0.
24. (Currently Amended) A foam of claim 1, wherein the foam is capable of being passed down a 21 gauge needle such that 50% or more by number of its gas

bubbles of at least 25 μ m diameter remain at 150 μ m diameter or less and at least 95% of these bubbles at 280 μ m diameter or less.

25. (Currently Amended) A foam of claim 1, wherein at least 50% by number of the gas bubbles of at least 25 μ m diameter are of no more than 120 μ m diameter and at least 95% of these gas bubbles are of no more than 250 μ m diameter.

26. (Previously presented) A method for angiologic treatment comprising injecting a foam of claim 1 into vessels to be treated.

27. (Previously presented) A method for phlebologic treatment comprising injecting a foam of claim 1 into vessels to be treated.

28. (Currently Amended) The method of claim ~~25~~ 27 wherein substantially the entire greater saphenous vein of one leg of a human patient is treated by a single injection of foam.

29. (Previously presented) The method of claim 27 wherein the single injection uses an amount ranging from 10ml to 50ml of foam.

30. (Canceled)

31. (Currently Amended) The method of claim 27 wherein the single injection uses an amount ranging from 15ml ~~and~~ to 30ml of foam.

32-63. (Canceled)

64. (Currently Amended) A method for producing a foam comprising passing a mixture comprising at least one physiologically acceptable blood dispersible gas and at least one aqueous sclerosant liquid through one or more passages having at least one cross-sectional dimension of from 0.1 to 15 μm ,
the mixture comprises not more than 0.8% nitrogen gas by volume,
the ratio of gas to liquid being controlled such that the foam is produced having a density less than 0.25 g/cm³ and a half-life of greater than 100 secs.

65. (Previously presented) The method of claim 64, wherein the physiologically acceptable blood dispersible gas is chosen from CO₂, O₂ and mixtures thereof.

66. (Previously presented) The method of claim 64, wherein the physiologically acceptable blood dispersible gas is at least 50% CO₂.

67-68. (Canceled)

69. (Previously presented) The method of claim 64, wherein the physiologically acceptable blood dispersible gas comprises at least 99% CO₂.

70. (Previously presented) The method of claim 64, wherein the physiologically acceptable blood dispersible gas consists essentially of CO₂.

71. (Currently Amended) The method of claim 64, wherein the half life is at least 120 seconds.

72. (Canceled)

73. (Previously presented) The method of claim 64, wherein the half life is at least 180 seconds.

74. (Previously presented) The method of claim 64, wherein the density ranges from 0.07 to 0.19 g/ml.

75. (Previously presented) The method of claim 64, wherein the mixture further comprises at least 20% vol/vol of at least one viscosity enhancing agent.

76. (Previously presented) The method of claim 75, wherein the at least one viscosity enhancing agent is chosen from glycerol and PVP.

77. (Canceled)

78. (Previously presented) The method of claim 64, wherein the at least one sclerosing agent is chosen from polidocanol, glycerol and sodium tetradecyl sulphate.

79. (Previously presented) The method of claim 78, wherein the at least one sclerosing agent is polidocanol.

80. (Previously presented) The method of claim 64, wherein the foam has a viscosity ranging from ranging from 2.0 to 3.5 cP.

81. (Currently Amended) The method of claim 64, wherein the foam is capable of being passed down a 21 gauge needle such that 50% or more by number of its gas bubbles of at least 25 μ m diameter remain at 150 μ m diameter or less and at least 95% of these bubbles at 280 μ m diameter or less.

82. (Currently Amended) The method of claim 64, wherein at least 50% by number of the gas bubbles of at least 25 μ m diameter are of no more than 120 μ m diameter and at least 95% of these gas bubbles are of no more than 250 μ m diameter.

83-86. (Canceled)